



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,261	02/06/2002	James Edward Dickens	60027.0090US01	8459

39262 7590 01/24/2005
BELLSOUTH CORPORATION
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

WOODS, ERIC V

ART UNIT PAPER NUMBER

2672

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,261

Applicant(s)

DICKENS, JAMES EDWARD

Examiner

Eric V Woods

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. That is, a human being can perform the claimed method without a computer being required. Thusly, the claims are not embodied in the technological arts. A computer is not required to complete the method. Please see detailed explanation under the 35 U.S.C. 102(b) for details on this point. See also MPEP 2106. That is, a human being using pencil and paper (and a grid with very fine spacing) could accomplish all the recited steps.

3. Claims 15-20 are rejected because they recite software per se (see MPEP 2105 and 2106), as the claimed subject matter is not tangibly embodied on a computer-readable medium.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2672

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 rejected under 35 U.S.C. 102(b) as being anticipated by a mental process in a human being augmented with a pencil and paper. This rejection is proper under MPEP 2106, *In re Prater* doctrine. A human being could draw the recited sheet of graph paper and write the associated characters. The scanning would be done with the human eye, and a human being laying a grid with very fine features on the graph paper could digitize the sheet. Further, after laying the grid on the paper, said human being could then write a long string of ones and zeros producing the same output as a digital scanner, and then take only the binary representation of the scanned characters by only laying the grid over the specific, written areas according to the position of the characters on the sheet. Finally, having done all of this, storing the font could constitute said human being merely writing a long string of binary to represent the stated font. Clearly, a computer is not required, ergo a human being so augmented anticipates this method.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4, 6, 8-11, 13, and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenwick (US 5,412,771)('Fenwick') in view of vLetter (vLetter

software, form that embodies part of the Fenwick patent, from 1996, from vLetter website) [Claims 8-14 recite a computer system that performs the recited task, and claims 15-20 recite a computer program product. These are trivially obvious variations of claims 1-7, and are substantively the same claims. As such, the rejections valid on claims 1-7 are equally valid upon claims 8-20 as set forth below without further comment or modification.]

8. As to claims 1, 8, and 15,

A method of generating a computer font, comprising: (Fenwick 1:4-12)

Providing a sheet having a grid pattern, the grid pattern providing blank spaces with an indication of the character associated with each blank space; (vLetter pg. 1; Fenwick 4:19-30; the grid pattern is obvious on the bottom portion of the vLetter reference; it would have been obvious to modify the vLetter sheet to use a grid instead of special blocks so as to be easier to print and such that it would accommodate modifications more easily)

Writing the associated characters in the blank spaces; (vLetter pg. 1, Fenwick 4:19-30)

Scanning the sheet to digitize the written characters; (Fenwick 4:19-30)

Associating the digitized characters with the corresponding characters of a character set according to the position of the written characters on the sheet; and (Fenwick, claim 17 13:20-33; *prima facie* obvious based on the fact that clearly a font has a character set, and for handwritten characters to be in a font after digitization of the font, clearly each character must be associated with its equivalent in the character set; inherent in how a font is defined, as discussed under the obvious statement immediately above).

Storing the associated and digitized characters as a font. (Fenwick 1:5-15, claim 17 (13:20-33), et cetera; vLetter page 2).

Reference Fenwick clearly teaches the creation of a personalized handwriting font based on scanned characters that accurately reflects a person's writing style (e.g. claim 17), but does not expressly teach the limitation of a form with blank spaces, et cetera. The inventor Fenwick started a company – Signature Software® -- that sells a product that uses the patented technology and provides forms for entering the information – the vLetter reference. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the handwriting-based, personal-font-forming technology of Fenwick with the forms of vLetter, as they are invented and controlled by the same individual and entity as well as being an obvious embodiment of the techniques taught in claim 17 of Fenwick and would be obvious in light of the patent, especially given that the font is designed to accurately reflect the connections between letters for handwriting.

9. As to claims 2, 9, and 16,

The method of claim 1, wherein one or more of the blank spaces are associated with alphabetical characters.

Reference Fenwick does not explicitly teach this limitation. Reference vLetter clearly teaches on the shown form many blank spaces for the inputting of alphabetic characters – that is, there many blank spaces to input words and letter combinations, as well as individual letters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the handwriting-based, personal-font-

forming technology of Fenwick with the forms of vLetter, as they are invented and controlled by the same individual and entity as well as being an obvious embodiment of the techniques taught in claim 17 of Fenwick and would be obvious in light of the patent, especially given that the font is designed to accurately reflect the connections between letters for handwriting.

10. As to claims 3, 10, and 17,

The method of claim 1, wherein one or more of the blank spaces are associated with numerical characters and one or more of the blank spaces are associated with symbolic characters.

Reference Fenwick does not explicitly teach this limitation. Reference vLetter clearly teaches on the shown form many blank spaces for the inputting of numerical and symbolic characters – that is, there many blank spaces to input these numbers and such, especially at the bottom of the page, as well as individual letters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the handwriting-based, personal-font-forming technology of Fenwick with the forms of vLetter, as they are invented and controlled by the same individual and entity as well as being an obvious embodiment of the techniques taught in claim 17 of Fenwick and would be obvious in light of the patent, especially given that the font is designed to accurately reflect the connections between letters for handwriting.

11. As to claims 4, 11, and 18,

The method of claim 1, wherein one of the blank spaces is associated with a signature.

Reference Fenwick does not explicitly teach this limitation. Reference vLetter clearly teaches on the shown form a blank space for the inputting of a signature at the top left of the page. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the handwriting-based, personal-font-forming technology of Fenwick with the forms of vLetter, as they are invented and controlled by the same individual and entity as well as being an obvious embodiment of the techniques taught in claim 17 of Fenwick and would be obvious in light of the patent, especially given that the font is designed to accurately reflect the connections between letters for handwriting.

12. As to claims 6 and 13,

The method of claim 1, wherein the step of providing a sheet includes printing the sheet with each character printed adjacent each blank space associated with the character and wherein each printed character is the indication of the character to be written in each blank space.

Reference Fenwick does not explicitly teach this limitation. Reference vLetter clearly teaches this limitation, as the form is clearly printed as recited above, as it is provided to the user in that format. Clearly, as is shown on the sample form on page 1 of the vLetter reference, the individual letters are written in the blank spaces provided. Also, each number and symbol is written in the blank space provided, some by themselves. The vLetter reference already provides printed characters that are indications of the characters to be written in each blank space. Given that there are blocks provided where an individual would write two separate symbols (e.g. the box

containing the < > at the bottom of the page), it would have been obvious to modify the vLetter reference to have separate, blank spaces for each character so that letters for abbreviations, etc., could be written out (for example: e.g., A.M., etc.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the handwriting-based, personal-font-forming technology of Fenwick with the forms of vLetter, as they are invented and controlled by the same individual and entity as well as being an obvious embodiment of the techniques taught in claim 17 of Fenwick and would be obvious in light of the patent, especially given that the font is designed to accurately reflect the connections between letters for handwriting.

13. Claims 5, 12, and 19 are rejected under 35 U.S.C. 103(a) as unpatentable over Fenwick in view of vLetter as applied to claim 1 above, and further in view of Sanger (US PGPub 2001/0048436 A1)('Sanger').

As to claims 5, 12, and 19,

The method of claim 1, wherein the step of writing the associated characters includes writing characters in a color other than black, the method further comprising the step of associating the digitized character with the color of the written character and wherein storing the associated and digitized characters as a font includes storing the association of color for each character.

References Fenwick and vLetter do not explicitly teach this limitation. It would have been obvious to modify the invention of vLetter and Fenwick to hold color information from the scanning process for each glyph or letter (as almost all scanners sold in the last five years scan in color resolution, and it is well known in the art to set

Art Unit: 2672

fonts to be different colors). The Sanger reference supports this by allowing users to set font colors, font size, font "messiness" levels, et cetera, for electronic mail. Clearly, one could use the Sanger system to set different characters to the same font but different colors by manually selecting and altering each character. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the Fenwick and vLetter font-creating system with the font color, size, et cetera – setting systems for electronic mail with the obvious modification as set forth above, since color information would be obtained by the scanner anyway and it is well known in the art that individual users prefer to be able to change the colors of characters and their fonts.

14. Claims 7, 14, and 20 are rejected under 35 U.S.C. 103(a) as unpatentable over Fenwick in view of vLetter as applied to claim 1 above, and further in view of Van Sickle et al (US 6,707,466 B1)('Van Sickle').

As to claims 7, 14, and 20,

The method of claim 1, wherein the grid pattern provides a registration of the sheet and wherein associating the digitized characters with the corresponding characters includes determining the orientation of the character from the registration of the sheet.

References Fenwick and vLetter do not explicitly teach this limitation. Reference Van Sickle teaches the use of paper guides to fill out digital forms, e.g. a paper form is inserted on top of a tablet PC and used a guide to fill out forms (see Fig. 16 and 2:19-32, 3:10-42). The system performs auto-correction and detects the orientation of marks made on the paper form just as it would if the user filled out the same form on the digital

tablet. The tablet and forms can take handwritten input and correct the orientation of handwritten input (3:1-30). Clearly, the system can correct registration errors caused by misalignment of a paper form placed on the digitizer (Van Sickle Fig. 16) and a process to do that is shown in Fig. 9.

It is well known in the art of document scanning that such document scanners and software can easily and automatically correct for document skew or registration angle problems. Further, techniques such as those used by Van Sickle can easily correct for such problems as well. It would be obvious that a character orientation would be determined based on the registration of the sheet, as otherwise a random piece of scanned image might be assigned as a character. Grid lines are well known in the art, and the system of vLetter – the bottom part of the form – could easily be replaced by a grid-based system as discussed in the rejections to claims 4, 5, and 6 that would perform the same task.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the Fenwick and vLetter references with that of Van Sickle, particularly in light of the fact that the Van Sickle reference is analogous art (same classification) and further that grid lines or box positions on the vLetter form would be obvious points of registration, as there is a line in the middle of the page, for instance, that could serve as a registration point.

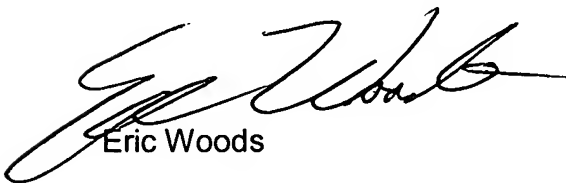
Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 6,298,154 to Cok and US PGPub 2004/0091176 to Bai.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V Woods whose telephone number is 703-305-0263. The examiner can normally be reached on M-F 7:30-5:00 alternate Fridays off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric Woods

January 10, 2005



JEFFREY G. BRIEN
PRIMARY EXAMINER